12. (new) A method of eliminating interference by hemoglobin in the determination of alkaline phosphatase in a sample, comprising:

adding 4-nitrophenyl phosphate to said sample;

determining a first optical measurement of said sample at 450 ± 10 nm;

determining a second optical measurement at one or more secondary wavelengths selected from the group consisting of 480 ± 10 nm, 546 ± 10 nm, and 575 ± 10 nm; and

combining the first and second optical measurements.

13. (new) The method of claim 12, wherein the first and second optical measurements comprise absorbance determinations.

14. (new) The method of claim 12, wherein the first and second optical measurements comprise change in absorbance determinations.

15. (new) The method of claim 12, wherein the secondary wavelength is 570 nm.

16. (new) The method of claim 12, wherein said sample comprises a plasma or serum sample.

17. (new) The method of claim 12, wherein said sample comprises a blood substitute.

18. (new) The method of claim 17, wherein the blood substitute comprises derivatized hemoglobin, polymerized hemoglobin, modified hemoglobin, or cross-linked hemoglobin.

19. (new) The method of claim 17, wherein the blood substitute comprises human hemoglobin or bovine hemoglobin.

20. (new) The method of claim 17, wherein the blood substitute comprises a recombinantly-produced hemoglobin.

21. (new) The method of claim 17, wherein the blood substitute comprises diaspirin-crosslinked hemoglobin.

22. (new) The method of claim 12, wherein said sample has a hemoglobin concentration of up to about 3000 mg/dl.

23. (new) The method of claim 12, wherein said sample has a hemoglobin concentration of up to about 6500 mg/dl.

24. (new) A method of determining a level of alkaline phosphatase in a sample containing 4-nitropheny phosphate, the method comprising:

combining a first optical measurement determined at 450 ± 10 nm with a second optical measurement determined at a secondary wavelength selected from the group consisting of 480 ± 10 nm, 546 ± 10 nm, and 575 ± 10 nm.

25. (new) The method of claim 24, wherein the first and second optical measurements comprise absorbance determinations.

26. (new) The method of claim 24, wherein the first and second optical measurements comprise change in absorbance determinations.

27. (new) The method of claim 24, wherein the secondary wavelength is 570 nm.

28. (new) A method of determining a level of alkaline phosphatase in a sample, comprising:

adding 4-nitrophenyl phosphate to said sample;

measuring a first change in absorbance of said sample at 450 ± 10 nm;

measuring a second change in absorbance of said sample at 480 ± 10 nm, 546 ± 10 nm, or 575 ± 10 nm; and

combining the first and second changes in absorbance.